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10/585,166	05/06/2009	Micheal V. Pavlov	COBR-11093	8322

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SCHMEISER OLSEN & WATTS
18 E UNIVERSITY DRIVE
SUITE # 101
MESA, AZ 85201

EXAMINER	
KENNEDY, JOSHUA T	
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3679	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/585,166	PAVLOV, MICHEAL V.	
	Examiner	Art Unit	
	JOSHUA T. KENNEDY	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *126-129* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *126-129* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

Page 50, Line 8: “and 622” should be changed to --and 623--..

Appropriate correction is required.

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 1-4 have been renumbered 126-129 (see attached annotated set of claims).

Claims 126-129 have been examined.

Claims 126 and 129 are objected to because of the following informalities:

Claim 126, Line 2: "comprising" should be --comprises--.

Claim 126, Line 2: "of the coil" should be removed.

Claim 126, Line 3: "of the coil" should be removed.

Claim 129, Line 1: “tap” should be changed to --tape--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 126-129 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 126-129 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationship is the intersection(s) of the first and second coil which forms an internal truss(es). As the claim currently reads "a first intersection" does not necessarily imply/require a positive connection between the first and second coil, but merely that they cross each other. However, it appears as if a positive connection is necessary to result in the intersection forming an internal truss which provides structural integrity to the coil tape product and further forms a zig zag pattern in a partially deployed stated and a generally linear configuration in a fully deployed state as is disclosed and claimed.

Further, it is unclear as to what structure is defined by the limitation: "an internal truss". What are the structural metes and bounds of this "truss"? Is it merely the intersection point of the first and second coils? As for the limitation: "a plurality of similar trusses", does "similarly formed" require each truss to be formed by an intersection/overlap of the first and second coil? Is the plurality of similar trusses merely

multiple other intersections of the first and second coils? Do all of the trusses comprise portions of the first and second coils? Does the first internal truss form an oval? Are there ovals formed along the first **and** second axes? If so, this is not shown in the drawings. It appears as if there is just one set of upright ovals and while that one set is situated along the length of the deployed coil, it appears as if it is not formed along two separate axes.

Yet further, in claims 2 and 3, it is unclear as to which truss(es) is/are being referred. In other words, in Claim 2, is the first "internal truss" part of the zig zag pattern in a partially deployed state, or is the pattern only formed by the "plurality of similarly formed internal trusses"? In claim 3, is the plurality of similarly formed trusses part of generally upright linear configuration in a fully deployed state, or is it just the first internal truss that forms the linear configuration?

Finally, it appears as if Applicant intends to seek patent protection for the final product, however, Applicant claims the structure in a plurality of different states (i.e. "partially deployed state, "fully deployed state"). What structurally defines each of these states? For purposes of examination, the Examiner presumes that it is the final product for which Applicant is seeking coverage (As seen in Fig 21D). As is such, Examiner reminds applicant that it is the patentability of the product, and not recited process steps, that is to be determined in product-by-process claims irrespective of whether or not only process has been recited.

In view of the above, the art rejection applied for this Office action is as the invention is best understood by the Examiner because of the speculation regarding the scope and content of the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 126-129 rejected under 35 U.S.C. 102(b) as being anticipated by Kirsch et al (US Patent 3,070,946).

As to Claim 126, as best understood Kirsch et al disclose a plural coil tape product comprising:

a first coil (2; Fig 4) extending from a first end to a second end along a first coil axis;

at least a second coil extending generally from a first end to a second end along a second coil axis (2; Fig 4);

the second coil intersecting the first coil in at least partially overlapping side by side relation in a first intersection along the first and second coil axes (Fig 3; Col 2, line 19; Examiner considers the "intertwining" of coils to create the intersection of the first and second coils);

wherein:

the first intersection forms an internal truss comprising portions of the first and second coils (Examiner considers the "intertwining" of coils to create the intersection of the first and second coils, and thus the intersection point forming an internal truss);

a respective plurality of similarly formed internal trusses generally form a repeating pattern of upright ovals along the first and second coil axes when viewed from a side in a deployed state (Examiner considers the "intertwining" of coils to create a plurality of intersections of the first and second coils, and thus the points of intersection forming a plurality of trusses therein).

As to Claim 127, as best understood Kirsch et al disclose the plural coil tape product of claim 1, wherein:

the internal truss comprising portions of the first and second coils (Fig 3);

the respective plurality of similarly formed internal trusses generally form a zig zag pattern along the first and second coil axes when viewed from above in a partially deployed state (Since the points of intertwining/intersection are extended throughout the

coils, Examiner considers the points of intersection to form a zig zag pattern in a "connect-the-dots" type fashion).

As to Claim 128, as best understood Kirsch et al disclose the plural coil tape product of claim 1, wherein:

the internal truss comprises portions of the first and second coils (Fig 3);

the internal truss forms a generally upright linear configuration as viewed from an axial end in a fully deployed state (If the coils are stretched to their absolute limit, they inherently will straighten out and thus form a linear configuration).

As to Claim 129, as best understood Kirsch et al disclose the plural coil tape product of claim 3, further comprising a third coil intersecting the first and second coils in at least one circumferential position of each of the first and second coils (Fig 4).

Claims 126-128 rejected under 35 U.S.C. 102(b) as being anticipated by Sieffert (US Patent 3,155,374).

As to Claim 126, as best understood Sieffert discloses a plural coil tape product (Figs 3-4) comprising:

a first coil (1) extending from a first end to a second end of the coil along a first coil axis;

at least a second coil (2) extending generally from a first end to a second end of the coil along a second coil axis (Fig 4);

the second coil intersecting the first coil (at points 6-10; Fig 4) in at least partially overlapping side by side relation in a first intersection along the first and second coil axes (since the first coil completely envelopes the second coil, Examiner considers the two coils as "overlapping:);

wherein:

the first intersection forms an internal truss comprising portions of the first and second coils (Examiner considers the length of the second coil (2) between connection point 6 and connection point 7 to be an internal truss);

a respective plurality of similarly formed internal trusses (Examiner considers the points 7-10 and the length of second coil therebetween to be a plurality of similarly formed internal trusses) generally form a repeating pattern of upright ovals along the first and second coil axes when viewed from a side in a deployed state (see 2; Fig 3).

As to Claim 127, as best understood Sieffert discloses the plural coil tape product of claim 1, wherein:

the internal truss comprising portions of the first and second coils (Fig 4);

the respective plurality of similarly formed internal trusses generally form a zig zag pattern along the first and second coil axes when viewed from above in a partially deployed state (Fig 3).

As to Claim 128, as best understood Sieffert discloses the plural coil tape product of claim 1, wherein:

the internal truss comprises portions of the first and second coils (Fig 4);

the internal truss forms a generally upright linear configuration as viewed from an axial end in a fully deployed state (If the coils are stretched to their absolute limit, they inherently will straighten out and thus form a linear configuration).

Claims 126-129 rejected under 35 U.S.C. 102(e) as being anticipated by Gibbs (US Patent 7,325,787).

As to Claim 126, as best understood Gibbs discloses a plural coil tape product comprising:

a first coil (44/45) extending from a first end to a second end of the coil along a first coil axis (Fig 2);

at least a second coil (44/45) extending generally from a first end to a second end of the coil along a second coil axis (Fig 2);

the second coil intersecting the first coil (at 50) in at least partially overlapping side by side relation in a first intersection along the first and second coil axes (Fig 2); wherein:

the first intersection forms an internal truss comprising portions of the first and second coils (Fig 2);

a respective plurality of similarly formed internal trusses generally form a repeating pattern of upright ovals along the first and second coil axes when viewed from a side in a deployed state (Fig 1).

As to Claim 127, as best understood Gibbs discloses the plural coil tape product of claim 1, wherein:

the internal truss comprising portions of the first and second coils (Fig 2);

the respective plurality of similarly formed internal trusses generally form a zig zag pattern along the first and second coil axes when viewed from above in a partially deployed state (Since the points of intersection (50) are extended along the length of the coils, Examiner considers the points of intersection to form a zig zag pattern in a "connect-the-dots" type fashion).

As to Claim 128, as best understood Gibbs discloses the plural coil tape product of claim 1, wherein:

the internal truss comprises portions of the first and second coils (Figs 1-2);

the internal truss forms a generally upright linear configuration as viewed from an axial end in a fully deployed state (If the coils are stretched to their absolute limit, they inherently will straighten out and thus form a linear configuration).

As to Claim 129, as best understood Gibbs discloses the plural coil tape product of claim 3, further comprising a third coil intersecting the first and second coils in at least one circumferential position of each of the first and second coils (Fig 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 129 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sieffert.

As best understood Sieffert discloses the plural coil tape product significantly as claimed, but does not disclose a third coil intersecting the first and second coils in at least one circumferential position of each of the first and second coils. Sieffert does not disclose any structural or functional significance as to the specific number of coils in the tape product. Examiner reminds Applicant that it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. V Bemis Co., 193 USPQ 8 and that the duplication of parts has no patentable significance unless a new and unexpected result is produced and is a design consideration within the skill of the art. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). Accordingly it would have been obvious to one of ordinary skill in the art to modify the assembly of Sieffert to have a third coil intersecting the first and second

coils in at least one circumferential position of each of the first and second coils, further strengthening the wire defense coil as the reference does not disclose any structural or functional significance as to the specific number of coils in the tape product as this is merely a duplication of parts producing expected and predictable results.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent publications 20060214148, 20030099523, 7419140, D429342, 5139234, 5074529, 4978943, 4915359, 4484729, 2910256, 7290756, 6077005, 4906975, 3199807, 4503423, 7331568 and 3070946 all have been cited to show similar coil tape products.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA T. KENNEDY whose telephone number is (571)272-8297. The examiner can normally be reached on M-F: 7:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joshua T. Kennedy/
Examiner, Art Unit 3679
4/23/2010